

REMARKS

Applicants respectfully request reconsideration of the present application in view of the reasons that follow.

New claims 50 and 51 have been added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1, 3-31, 33-36, and 38-51 are now pending in this application.

Priority

Applicants note that the Office has not acknowledged Applicants' claim for foreign priority and receipt of a copy of the certified copy. Applicants respectfully request that the Office acknowledge Applicants' claim for foreign priority and receipt of a copy of the certified copy with the next Office correspondence.

Rejections under 35 U.S.C. § 103

Claims 1, 3-31, 33-36, and 38-49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,664,971 (hereafter "Soens") in view of EP 0953651, in view of U.S. Patent No. 2,050,298 (hereafter "Everett"), and U.S. Patent No. 3,379,000 (hereafter "Webber et al."). Claims 1, 3-5, 9-11, 13, 15-17, 21-30, 36, and 38-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,904,980 (hereafter "Rivas") in view of EP 0953651, Soens, and Everett. These rejections are respectfully traversed.

Soens discloses a plastic article containing electrically conductive fibers that are used for EMI shielding. See Soens at col. 1, lines 67-68; col. 2, lines 1-4. Soens discloses that the electrically conductive fibers can be bundle drawn stainless steel fibers. See Soens et al. at

col. 3, lines 7-10. As noted on page 3 of the Office Action, Soens does not disclose or suggest the composition recited by claims 1, 31, and 36.

Rivas discloses electromagnetic interference shielding and electrostatic discharge shielding that includes polymer material with stainless steel fibers. See Rivas at col. 4, lines 8-17. As noted on pages 5-6 of the Office Action, Rivas does not disclose or suggest the composition recited by claims 1, 31, and 36.

Everett and Webber et al. disclose methods of deforming metal filaments. However, Everett and Webber et al. do not disclose or suggest the composition recited by claims 1, 31, and 36.

Applicants note that EP 0953651 and U.S. Patent No. 6,048,416 (hereafter “Hauser et al.”) are related in that both EP 0953651 and Hauser et al. claim priority to FR 98 05356. EP 0953651 and Hauser et al. disclose a stainless steel wire composition that is used for tire reinforcement. See Hauser et al. at col. 1, lines 1-10. Hauser et al. discloses that the stainless steel composition provides excellent fatigue strength and is suitable for applications, such as tires, in which static or alternating forces must be withstood. See Hauser et al. at col. 1, lines 13-25; col. 6, lines 42-46.

It would not have been obvious to one of ordinary skill in the art to modify the article of Soens or shielding of Rivas by the teachings of EP 0953651, Everett, and Webber et al. A basic requirement of a *prima facie* case of obviousness is a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or to combine references. See M.P.E.P. §§ 2143, 2143.01. The Office states that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the stainless steel fibers of Soens, fibers of the type taught by Marandel, with the expectation of a known component functioning in its known manner.” See page 4 of the Office Action. The Office makes a similar statement on page 6 of the Office Action in regard to the modification of the shielding of Rivas. Such statements do not constitute a suggestion or motivation to combine because they do not state a suggestion or motivation present in the prior art references or in the knowledge of one of ordinary skill in

the art. The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness. See M.P.E.P. § 2143.01, part III. Furthermore, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness. See M.P.E.P. § 2143.01, part IV.

Furthermore, it would not have been obvious to one of ordinary skill in the art to look to the teachings of EP 0953651 and Hauser et al. when selecting a stainless steel composition for use in the article of Soens or the shielding of Rivas. As taught by Soens, metal compositions suitable for such uses would have certain conductivity values. See Soens at col. 3, lines 7-19. EP 0953651 and Hauser et al. disclose a stainless steel composition that is used for tire reinforcement, provides excellent fatigue strength, and is suitable for applications in which static or alternating forces must be withstood. See Hauser et al. at col. 1, lines 1-25; col. 6, lines 42-46. In other words, the composition disclosed by EP 0953651 and Hauser et al. is valued for its fatigue properties, not its conductivity properties, which makes the composition of EP 0953651 and Hauser et al. valued for reasons that differ from the materials that are suitable for the applications of Soens and Rivas. Therefore, it would not have been obvious to one of ordinary skill in the art to have looked to the teachings of EP 0953651 and Hauser et al. when selecting a stainless steel composition for use in the article of Soens or the shielding of Rivas.

For at least the reasons discussed above, withdrawal of these rejections is respectfully requested.

Dependent Claims 3, 33, 38, and 46-48

Claims 3, 33, and 38 depend upon claims 1, 31, and 36 and are allowable over the prior art for at least the reasons discussed above. Furthermore, claims 3, 33, and 38 require an MI value that is “less than -55.” EP 0953651 and Hauser et al. disclose a stainless steel that satisfies the relationship of JM with a value of -55 to -30. Therefore, neither EP 0953651 or Hauser et al. disclose a stainless steel composition that satisfies the relationship of MI, with a value of MI being less than -55.

The Office argues that an "...MI of -55 is close enough to the claimed MI that one of ordinary skill in the art would have expected the prior art and the present invention to have the same or similar properties." See Office Action at page 7. This argument is incorrect because the prior art, particularly EP 0953651 and Hauser et al., do not disclose the recited composition. Furthermore, it is incorrect to reject a composition that is different than the prior art merely because the prior art composition may "...have the same or similar properties" as the recited composition. The Office appears to be arguing that the prior art composition would inherently have the same properties as the recited composition. However, inherent properties are not germane to the determination of the patentability of a recited composition when the prior art composition is distinct from the recited invention.

Nor does the Office provide a reason why one of ordinary skill in the art would have been motivated to modify the composition disclosed by EP 0953651 and Hauser et al. to provide an MI value that is "less than -55." Applicants submit that one of ordinary skill in the art would not have been motivated to do so in light of the express teachings of EP 0953651 and Hauser et al. As discussed in the response filed on November 14, 2005, Hauser et al. distinguishes itself from the prior art, which uses high deformations that result in higher martensite content, which causes a sensitivity to wire breaking. See Hauser et al. at col. 1, lines 52-63. Furthermore, Hauser et al. discloses:

The index of JM must be in the interval from -55 to -30. In fact, if JM is lower than -55, the quantity of martensite formed remains low and the tensile strength cannot achieve high values above 2200 MPa, even after final drawing with a cumulative deformation ϵ close to 4.5.

See Hauser at col. 6, lines 34-39. Hauser et al. teaches away from a composition that satisfies the relationship of MI with a value less than -55. To modify the composition of EP 0953651 and Hauser et al. to provide a JM value outside of the interval of -55 to -30 would contravene the teachings of these references. A proposed obviousness modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference. See M.P.E.P. § 2143.01. The Examiner is not at liberty to not follow the M.P.E.P. and case law. Therefore, in light of the teachings of Hauser et al., one of ordinary skill in the art would not have modified the composition disclosed by EP 0953651 and Hauser

et al. so that the composition had a JM value outside of -55 to -30. Nor would one of ordinary skill in the art have been motivated to modify the composition disclosed by EP 0953651 and Hauser et al. in light of the teachings of EP 0953651 and Hauser et al. to provide a composition with a JM value in the interval from -55 to -30.

Claims 46-48 depend upon claim 1 and are allowable over the prior art for at least the reasons discussed above. Furthermore, claims 46-48 recite MI values that are not “close enough” to the JM values disclosed by EP 0953651 and Hauser et al. Nor would one of ordinary skill the art have been motivated to modify the JM values of the prior art to provide the recited MI values.

The Office has not provided reasons why it would have been obvious to one of ordinary skill to modify the teachings of the prior art references to make the articles of claims 3, 33, 38, and 46-48, particularly in light of the express teachings of EP 0953651 and Hauser et al. Withdrawal of these rejections is respectfully requested.

Dependent Claims 43-45 and 49

Claims 43-45 and 49 depend upon claim 1 and are allowable over the prior art for at least the reasons discussed above. Furthermore, the prior art fails to disclose or suggest a plastic article with stainless steel fibers of the composition recited in claim 1 that have undergone a deformation ϵ of at least 4.5 or 4.8 or 5.2, as recited in claims 43-45, or have an MI value that permits a reduction with a deformation of at least 4.5, as recited in claim 49.

The Office states that it would have been obvious to modify the reduction disclosed by EP 0953651 and Hauser et al. through routine experimentation to provide the recited reduction. However, this argument ignores the express teachings of EP 0953651 and Hauser et al. Hauser et al. distinguishes itself from prior art compositions that form martensite through work hardening from high reductions because these wires become break-sensitive. See Hauser et al. at col. 1, lines 47-51, 59-63. Hauser et al. discloses that wire deformation ϵ should preferably be smaller than 4.5. See Hauser et al. at col. 2, lines 48-50; col. 4, lines 32-43; col. 6, lines 34-38. Hauser et al. also discloses two comparison compositions, C and E, that are drawn with high deformations. See Tables 1 and 2 of Hauser et al. However, these

compositions have JM values of -78 and -81, respectively, which are far outside of the range required by Hauser et al. in col. 6, lines 34-38. Hauser et al. shows in Table 2 that compositions C and E are susceptible to breakage when drawn. Therefore, Hauser et al. teaches away from reductions with a deformation ϵ of at least 4.5.

In light of the teachings of EP 0953651 and Hauser et al. against deformations ϵ of at least 4.5, it would not have been obvious to one of ordinary skill in the art to modify the prior art references to provide a plastic article with stainless steel fibers of the composition recited in claim 1 that have undergone a deformation ϵ of at least 4.5 or that have an MI value that permits a reduction with a deformation of at least 4.5.

Furthermore, the Office has not provided a motivation for why one of ordinary skill in the art would have been motivated to modify the deformations disclosed by EP 0953651 and Hauser et al. through routine experimentation. In light of the teachings of EP 0953651 and Hauser et al. against deformations ϵ of at least 4.5, one of ordinary skill in the art would not have had a motivation to make such a modification. Applicants further note that only result-effective variables can be optimized through routine experimentation. See M.P.E.P. § 2144.05. The Office has not shown how deformation is recognized as a result-effective variable in the cited prior art or that the determination of an optimum deformation range could be conducted through routine experimentation.

The Office has not provided reasons why it would have been obvious to one of ordinary skill to modify the teachings of the prior art references to make the articles of claims 43-45 and 49, particularly in light of the express teachings of EP 0953651 and Hauser et al. Withdrawal of these rejections is respectfully requested.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

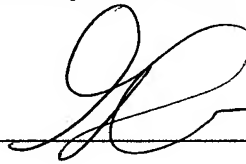
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

9/29/06

By



FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5426
Facsimile: (202) 672-5399

Glenn Law
Attorney for Applicant
Registration No. 34,371